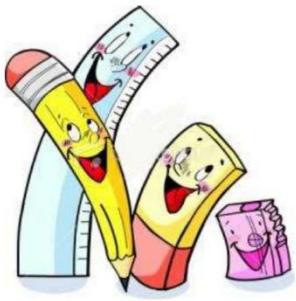
DEEPIKA PUBLIC SCHOOL

MANESAR

SESSION:- 2025-26

CLASS:- 9th

Dear Students



Summer vacations are synonymous with fun, frolic, getting up late in the morning, going for picnics, spending time with friends, exploring new places, and watching fun filled shows on television. But there is lot more you can do to make your vacations more meaningful, interesting, and fun while still doing your favourite activities.

Here are some suggestions you may like:

- Go out for morning walk and spend time to observe nature.
- Watch your mom working in the kitchen and help her keep the house clean.
- Visit your grandparents, spend time with them.
- Teach them to operate some useful applications in mobile phones.
- Plant a sapling and watch it grow.
- Play any sport with your parents which they played during their school days.
- Devote some time for reading during the summer break. Some suggested books:

Summer vacation is the time when you can be more candid and creative. The Holiday assignments are focused to let the creative and latent talents, skills and desires of the children come to the surface in a joyful and experiential manner.So dear children, Get… Set… Go… Enjoy doing the activities and ensure timely completion of the given assignments.

English

1.Draft a poster on any of your favourite freedom fighters.

2. Draft a poster showing the life and achievements of Dr. A.P.J. Abdul Kalam.

3. Read the newspaper daily and express your views on only one news article under the given headings : national, international, sports, glamour and business.

4. Write an article on the topic 'The Benefits and Harms of Computers ' in 200 words.

5. Write a self composed poetry on the given topics with minimum four stanzas.

A. Music

B. I am Blessed.

C. My School, My Pride

6.Refer the dictionary and write the full forms of all the abbreviations used in dictionary e.g. fem... feminine, prep... prepositions

7.From the base form of the verb , form adjectives, adverbs , nouns whatever possible by selecting minimum 30 words from the dictionary.

8. Prepare a project on the following topic ' A Comparative study on Lakshadweep and Andaman and Nicobar Islands ' in terms of location, formation, culture and characteristic features. Use maps, illustrations, collage etc.

9. Create a word search or crossword puzzle using vocabulary from your chapters.

10. Prepare a tense chart with proper sentence structure and examples.

11. Listen to the English news channels daily for preparing headlines.

12. Prepare a speech on ' My Vision for India '.

13. Write the following diary entries:

A. My First day of Online Classes

B. When I had to Choose a Gift for my mother

Note:

- Revise whole syllabus done till date.
- Do holidays Home -Work in a separate notebook.

हिंदी

(1) कबीर दास जी द्वारा रचित किन्ही 10 दोहों (पुस्तक के अतिरिक्त) को A4 साइज शीट पर सुंदर लेख में लिखिए तथा उन्हीं दोहों को कंठस्थ कीजिए।

(2) आपने किसी स्थान की यात्रा अवश्य की होगी या करने वाले होंगे। यात्रा के दौरान हुए अनुभवों को सुंदर लेख में लिखिए।

(3) पर्यावरण को बचाने के लिए आप कैसे योगदान दे सकते हैं, इससे संबंधित एक सुंदर चित्र बनाकर हिंदी की पोर्टफोलियो में लगाइए।

(4)काव्य खंड व गद्य खंड के समस्त पठित पाठों के प्रश्न उत्तर याद करिए।

(5) माखनलाल चतुर्वेदी के जीवन पर एक पोर्टफोलियो तैयार करिए।

नोटः पोर्टफोलियो ए-4 साईज शीट पर करना है तथा पृष्ठों को फाइल में लगाकर दें।

MATHEMATICS

- **Make a portfolio on topic, polynomials**.

Portfolio: Chapter 2 – Polynomials (Class 9 Maths)

Student Name:

Class 9:

Date:

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1. Introduction to Polynomials

- Definition: An algebraic expression made up of terms with variables raised to whole number powers.
- Example: 3x^2 - 2x + 5

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2. Classification of Polynomials

a) Based on Number of Terms
b) Based on Degree

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3. Important Concepts

- Degree of a polynomial: The highest power of the variable.
- Coefficient: The number multiplying the variable.
- Zeroes of a polynomial: The values of the variable for which the polynomial becomes zero.
- Factor Theorem: If f(a) = 0, then x - a is a factor of f(x).

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4. Graphical Representation

- Linear Polynomial: Straight line (e.g., y = 2x + 1)
- Quadratic Polynomial: Parabola (e.g., y = x^2 - 4)

(You can include graphs or draw them if you're working by hand.)

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5. Real-Life Applications

- Calculating area or volume: A = x(x + 5)
- Physics equations: s = ut + \frac{1}{2}at^2
- Business profit models

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6. Activities

- Tree Diagram of Types of Polynomials
- Riddle: "I am a quadratic trinomial whose zeroes are 2 and 3. Who am I?"
    - Answer: x^2 - 5x + 6
- Matching Game (Polynomial ↔ Degree/Type)

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7. Summary

Polynomials are essential algebraic tools that help in solving problems in various fields like geomet ry, science, and real-life applications.

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8. Reflection

What I enjoyed: Learning how polynomials are classified.

What I found challenging: Understanding zeroes and factorization.

What I want to explore more: Graphing polynomials.

ASSIGNMENT WORKSHEET

1. **What is the degree of the polynomial 3x^2 + 2x - 5?**
    - a) 0
    - b) 1
    - c) 2
    - d) 3
2. **Which of the following is a linear polynomial?**
    - a) x^2 + 2x + 1
    - b) 2x + 3
    - c) x^3 - x + 2
    - d) x^2 - 4
3. **The zero of the polynomial x^2 - 4 is:**
    - a) 2
    - b) -2
    - c) 4
    - d) ±2

4. **Which of the following is a constant polynomial?**
    - a) x + 1
    - b) x^2 - 1
    - c) 5
    - d) 2x + 3
5. **The sum of the zeroes of the quadratic polynomial x^2 - 5x + 6 is:**
    - a) 5
    - b) -5
    - c) 6
    - d) -6
6. **If x + 2 is a factor of the polynomial x^2 + 3x + k, then the value of k is:**
    - a) -6
    - b) 6
    - c) -3
    - d) 3
7. **The degree of the polynomial 5x^3 - 2x^2 + x - 7 is:**
    - a) 1
    - b) 2
    - c) 3
    - d) 4
8. **Which of the following is a binomial?**
    - a) x^2 + 2x + 1

- b) x^2 - 4
- c) x + 1
- d) x^2 + 2x + 3

9. **The product of x^2 - 1 and x + 1 is:**
   - a) x^3 - x - 1
   - b) x^3 + x - 1
   - c) x^3 - x + 1
   - d) x^3 + x + 1

10. **Which of the following is a quadratic polynomial?**
    - a) x + 1
    - b) x^2 - 4x + 4
    - c) x^3 - x + 2
    - d) x^2 + 2x + 3

11. **The coefficient of x in the polynomial $3x^2 + 2x - 5$ is:**
    - a) 3
    - b) 2
    - c) -5
    - d) 0

12. **The zero of the polynomial x + 3 is:**
    - a) -3
    - b) 3
    - c) 0

- d) 1

13. **Which of the following is a cubic polynomial?**

- a) x^2 + 2x + 1
- b) x^3 - x + 2
- c) x^4 - 2x^2 + 1
- d) x^5 - x^3 + x

14. **The product of x - 1 and x + 1 is:**

- a) x^2 - 1
- b) x^2 + 1
- c) x^2 - 2
- d) x^2 + 2

15. **The degree of the polynomial x^4 - 2x^2 + 3x - 4 is:**

- a) 1
- b) 2
- c) 3
- d) 4

16. **Which of the following is a monomial?**

- a) x + 1
- b) x^2 - 4
- c) 2x^3
- d) x^2 + 2x + 1

17. **The sum of the zeroes of the polynomial x^2 + 6x + 9 is:**

- a) -6
- b) 6
- c) 9
- d) -9

18.**If x - 3 is a factor of the polynomial x^2 + 5x + k, then the value of k is:**

- a) -15
- b) 15
- c) -5
- d) 5

19.**The degree of the polynomial 2x^4 - 3x^3 + x - 1 is:**

- a) 1
- b) 2
- c) 3
- d) 4

20.Which of the following is a polynomial in one variable?

- a) x + y
- b) x^2 + 2xy + y^2
- c) x^2 + 2x + 1
- d) x^2 + y^2

21.The coordinates of the origin are:

- a) (0, 0)
- b) (1, 1)

- c) (0, 1)
- d) (1, 0)

22.The x-axis is:

- a) Horizontal
- b) Vertical
- c) Diagonal
- d) None of the above

23.The y-axis is:

- a) Horizontal
- b) Vertical
- c) Diagonal
- d) None of the above

24.The point (3, 4) lies in which quadrant?

- a) Quadrant I
- b) Quadrant II
- c) Quadrant III
- d) Quadrant IV

25.The distance between the points (1, 2) and (4, 6) is:

- a) 3 units
- b) 4 units
- c) 5 units
- d) 6 units

26.The midpoint of the line segment joining (2, 3) and (4, 7) is:

- a) (3, 5)
- b) (4, 5)
- c) (3, 6)
- d) (4, 6)

27.The coordinates of the point which lies on the x-axis and is 5 units away from the origin are:

- a) (5, 0)
- b) (0, 5)
- c) (-5, 0)
- d) (0, -5)

28.The coordinates of the point which lies on the y-axis and is 3 units away from the origin are:

- a) (0, 3)
- b) (3, 0)
- c) (0, -3)
- d) (-3, 0)

29.The distance between the points (2, 3) and (2, 7) is:

- a) 3 units
- b) 4 units
- c) 5 units
- d) 6 units

30.The midpoint of the line segment joining (1, 2) and (3, 4) is:

- a) (2, 3)
- b) (3, 2)
- c) (2.5, 3.5)
- d) (3.5, 2.5)

31.The coordinates of the point which lies on the x-axis and is 4 units away from the origin are:

- a) (4, 0)
- b) (0, 4)
- c) (-4, 0)
- d) (0, -4)

32.The distance between the points (0, 0) and (3, 4) is:

- a) 3 units
- b) 4 units
- c) 5 units
- d) 6 units

Note: Do the above assignments in Maths fair notebook.

Social Science

'Titanium'

*Write down "The Preamble of Indian Constitution" on a A4 size sheet &learn it.

*Follow up a news channel & note down one news daily for ten days in your fair notebook.

*Complete your N/B of ch. 1.,2 geography, ch. 1Civics , ch. 1 2,Economics,
*Learn ch. 1.,2 geography, ch. 1 Civics , ch. 1 ,2 Economics Question/Answer

Map Work (to be pasted in fair notebook)

- Physical features of India.
- Standard meridian of India.
- Length & breadth of India.
- State & capital of India

- Neighbouring countries of India.

'Platinum'

1. **Learn** all the chapters completed so far.
2. **Write** 20 MCQs or one-word answer type questions from **each completed chapter** in a separate notebook.
3. **Prepare a project** on the topic: **Disaster Management**.

Science

Biology:

- Solve the MCQs and Short Question Answer of chapter-5 in your notebook from NCERT exempler.
- Make a portfolio on "Pollution effect on Human Being" from roll no. 1 to 10.
- Learn ch-1 and Plant tissue.

Physics:

- Solve question of Physics Chapter-1,2 of NCERT in your notebook.
- Make a porfolio on "Applications of Newton's Laws of motion in your Life" from roll no. 11 to 20.

Chemistry:

1. Make a project on topics- Matter in our surroundings, Is matter around us pure? (Roll no. 21 to 30)
2. Learn and Practice question answers of chapter 2 in a rough notebook.

Physical Activity Trainer

Write and learn topics of:

- Chapter- 2 Self Management
- Chapter- 4 Entrepreneurship